## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please enter the amendment for claim 45, as indicated below.

45. (Amended Once) The method according to claim 27 wherein the hydrophilic pharmaceutically acceptable carrier of the composition is between about 0.1% to about 30% ROH by weight, where R is alkyl or aryl.

Support for this amendment is found in claim 27. No new matter has been added.

## **Listing of Claims:**

1-26 (previously canceled).

27. (Previously presented) A method for the treatment of onychomychosis comprising: topically administering a composition comprising:

a compound according to formula I, and salts thereof;

$$(R^7)_{1.4}$$
 $R^2$ 
 $R^3$ 

(I)

where R<sup>1</sup> is hydrogen, alkyl or aryl;

R<sup>3</sup> is hydroxy, heteroalkyl, alkyl, heteroaryl or aryl;

R<sup>2</sup> is O or S;

each R<sup>7</sup> is independently hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

a copper composition;

a peroxide;

a polyhydroxy aromatic compound;

a transition metal coordination complex;

dissolved or suspended in a pharmaceutically acceptable carrier.

- 28. (Previously presented) The method according to claim 27 wherein the composition further comprises a boric acid.
- 29. (Previously presented) A method for the treatment of onychomychosis comprising:
  - (a) cleaning a selected topical area for treatment;
  - (b) topically administering a composition consisting essentially of; a compound according to formula II

a copper composition;

a peroxide;

a polyhydroxy aromatic compound;

a transition metal coordination complex;

dissolved or suspended in a pharmaceutically acceptable carrier and pharmaceutically acceptable salts thereof.

- 30. (Previously presented) The method according to claim 29 wherein the composition further comprises boric acid and the step of cleaning further includes debriding.
- 31. (Previously presented) A method of preventing onychomychosis on a mammal comprising:
- (a) administering to a selected site an effective amount of a composition consisting essentially of; a compound according to formula I and salts thereof

$$(R^7)_{1-4}$$
 $R^2$ 
 $R^3$ 

**(I)** 

where R<sup>1</sup> is hydrogen, alkyl or aryl;

R<sup>3</sup> is hydroxy, heteroalkyl, alkyl, heteroaryl or aryl;

R<sup>2</sup> is O, S or N;

each R<sup>7</sup> is independently hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

a copper composition;

a peroxide;

a polyhydroxy aromatic compound;

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a transition metal coordination complex.

- 32. (Previously presented) The method according to claim 31 wherein the composition further comprises a boric acid and the method further comprises topically administering a barrier composition to the selected site.
- 33. (Previously presented) The method according to claim 31 further comprising cleaning the selected site prior to administering to the selected site an effective amount of the composition.
- 34. (Previously presented) The method according to claim 27 wherein the copper composition of the compound is a copper complex.
- 35. (Previously presented) The method according to claim 34 wherein the copper complex is a diamine polymer-copper complex.
- 36. (Previously presented) The method according to claim 27 wherein the coordination complex of the compound is a Co chelate or complex.
- 37. (Previously presented) The method according to claim 27 wherein the coordination complex of the compound is a Zn chelate or complex.
- 38. (Previously presented) The method according to claim 27 wherein the coordination complex of the compound is a Fe chelate or complex.

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- 39. (Previously presented) The method according to claim 27 wherein the polyhydoxy aromatic compound of the composition is a 1,2,4,5-tetra hydroxy benzene.
- 40. (Previously presented) The method according to claim 27 wherein the peroxide of the compound is an organic peroxide.
- 41. (Previously presented) The method according to claim 27 wherein the peroxide of the compound is an inorganic peroxide.
- 42. (Previously presented) The method according to claim 27 wherein the peroxide of the compound is hydrogen peroxide.
- 43. (Previously presented) The method according to claim 27 wherein the hydrophilic carrier of the composition is between about 50% to 99% water by weight.
- 44. (Previously presented) The method according to claim 27 wherein the hydrophilic carrier of the composition is between about 1% to 50% a compound according to formula III:

$$R_6$$
 $R_4$ 
 $R_5$ 
 $R_5$ 
 $R_6$ 
(III)

wherein  $R_4$  is a heteroatom,  $R_5$  is heteroalkyl or GH where G is a heteroatom and  $R_6$  is hydrogen, alkylaryl, aryl or heteroaryl and n and x are independently between about 1 and 20.

- 45. (Amended Once) The method according to claim 27 wherein the pharmaceutically acceptable carrier of the composition is between about 0.1% to about 30% ROH by weight, where R is alkyl or aryl.
- 46. (Previously presented) A method of preventing onychomychosis on a mammal comprising:
- (a) administering to a selected site a composition comprising; a compound according to formula I and salts thereof;

$$(R^7)_{1-4}$$
 $R^2$ 
 $R^3$ 

**(I)** 

where R<sup>1</sup> is hydrogen, alkyl or aryl;

R<sup>3</sup> is hydroxy, heteroalkyl, alkyl, heteroaryl or aryl;

R<sup>2</sup> is O, S or N;

each R<sup>7</sup> is independently hydrogen, alkyl, hetero, heteroalkyl, aryl or heteroaryl;

- a copper composition;
- a peroxide;
- a polyhydroxy aromatic compound;
- a transition metal coordination complex;
- a boric acid composition.

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- 47. (Previously presented) The method according to claim 46 further comprising administering a barrier composition to the selected site.
- 48. (Previously presented) The method according to claim 46 wherein the barrier composition is a barrier to water.